

AMENDMENTS TO THE CLAIMS

1. (canceled)
2. (canceled)
3. (canceled)
4. (currently amended) ~~A~~The multi-directional ball switch as claimed in claim-~~1~~ 10,
wherein said switching section ~~(7)~~ comprises:
a supporting plate ~~(33)~~ having a hinge hole ~~(33a)~~;
a hinge shaft ~~(34)~~ that is inserted into said hinge hole ~~(33a)~~;
a stopper ~~(38)~~ that is equipped with a supporting ball ~~(36)~~ located at the center of said
supporting plate ~~(33)~~; and
a press sensor ~~(39)~~ that is installed between the top of the free-end of said supporting plate
~~(33)~~ and the down surface of said panel ~~(2)~~.
5. (currently amended) ~~The~~A multi-directional ball switch as claimed in claim-~~2~~ 10,
wherein said rotation shafts ~~(26-29)~~ are installed to support both sides of said ball knob ~~(3)~~
so that said ball knob ~~(3)~~ can rotate in only one direction of up/down or left/right at a time.
6. (currently amended) ~~A~~The multi-directional ball switch as claimed in claim-~~2~~ 10,
wherein said 4 click encoders ~~(22-25)~~ are constructed to generate a click sound or a click
vibration while said rotation shafts ~~(26-29)~~ are rotating.
7. (canceled)
8. (canceled)
9. (canceled)

10. (new) A multi-directional ball switch which comprises:

a panel having four (4) diagonally-located fixtures, each of which has an orthogonal shaft-like hole;

a ball knob placed on said panel;

a conversion means that transforms the rotation of said ball knob into an electrical signal, said conversion means including four (4) rotation shafts that are inserted into the orthogonal shaft holes of said four (4) diagonally-located fixtures, respectively; and

four (4) click encoders into which ends of said four (4) rotation shafts are inserted, respectively; wherein bottoms of said four (4) click encoders are fixed on said panel;

a CPU connected to said conversion means and to a sound generation section;

a switching section that restrains the rotation of said ball knob and generates an output value from said CPU; and

a signal generation section connected to said CPU.

11. (new) A multi-directional ball switch comprising:

a panel having four (4) diagonally-located fixtures, each of which has an orthogonal shaft-hole;

a ball knob placed on said panel;

a conversion means that transforms the rotation of said ball knob into an electric signal;

a CPU that is connected to said conversion means and to a sound generation section, said sound generation section being established to generate different characteristic sounds through a speaker according to the direction of movements of said ball knob, such as, up, down, left, right and press;

a switching section that restrains the rotation of said ball knob and generates an output value from said CPU; and

a signal generation section connected to said CPU.